

NOTES ON EXOTIC FORFICULIDS OR EARWIGS, WITH DESCRIPTIONS OF NEW SPECIES.

By JAMES A. G. REHN,

Of the Academy of Natural Sciences of Philadelphia.

The following records and notes have been made almost wholly from the United States National Museum collections, a few specimens from other collections having been studied and noted when of interest for comparative or faunistic reasons.

My thanks are extended to Dr. Richard Rathbun and other officials of the Museum for the privilege of studying this and other collections.

Genus PYGIDICRANA Serville.

1831. *Pygidicrana* SERVILLE, Ann. Sci. Nat., XXII, p. 30.

Type.—*P. V-nigrum* Serville.

PYGIDICRANA PERUVIANA, new species.

Type.—Female; Piches and Perene valleys, 2,000–3,000 feet, Peru. (Soc. Geogr. de Lima.) [Cat. No. 8171, U.S.N.M.]

Apparently a very distinct species of the genus.

Size rather large; form depressed, subequal; surface minutely tuberculate and supplied with fine stiff hairs, which are longest on the head and shortest on the abdomen. Head trigonal, deplanate, caudolateral angles of the head subrectangulate; eyes distinctly though moderately projecting laterad; antennæ with eighteen joints present (terminals missing), the proximal joint large, moderately long, cylindrical, second joint short, third joint about equal to the first in length, but slenderer, cylindrical, remaining joints increasing in size distad from the subspherical fourth joint. Pronotum slightly longer than broad, somewhat produced meso-cephalad, rounded caudad, lateral margins subparallel, angles rounded; longitudinal lateral depressions distinct, transverse depression much shallower and caudad of the middle; a very faint and shallow precurrent, median sulcus is present. Tegmina about twice the length of the pronotum, the "shoulder" angles broadly rounded, the caudal margins obliquely trimmed toward the median line. Exposed portions of the wings not quite equal to

the pronotum in length, rounded with the tips squarely truncate. Abdomen with the sides parallel; anal segment large, equal to the pronotum in length and very slightly wider than the other segments, with extremely faint traces of a median depression and the caudal

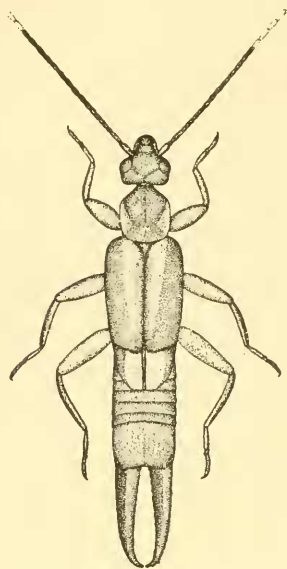


FIG. 1.—PYGIDICRANA PERUVIANA.
× 2.

margin truncato-emarginate; subgenital plate arcuate with the apex subtruncate and slightly emarginate mesad. Forceps moderately long, depressed, carinate above, the tips rather bluntly hooked, the internal margins crenulato-dentate. Femora considerably inflated, particularly the cephalic. Tarsi compressed, the second not depressed, the terminal joint on all the limbs at least as long as the basal.

General color of the head, antennae, pronotum, tegmina, and exposed portions of the wings seal brown; a narrow margin on each side of pronotum, an elongate lanceolate spot on each tegmen, placed near the mesal line of the body, restricted to the cephalic three-fourths and with the apex caudad and a blotch covering the internal two-thirds of each wing tawny ochraceous. Abdomen liver brown, the segments except the anal slightly darker proximad.

Forceps dark liver brown, ventral surface of the same and the subgenital plate burnt sienna. Limbs tawny ochraceous, the tibiae marked dorsad with blackish.

Measurements.

	mm.
Length of body (excluding forceps)	18.5
Length of pronotum	3.5
Length of tegmen	7.2
Length of exposed portion of wing	2.0
Length of anal segment	3.2
Breadth of anal segment	3.2
Length of forceps	6.5

Genus LABIDURA Leach.

LABIDURA RIPARIA (Pallas).

1773. *Forficula riparia* PALLAS, Reise Russ. Reichs, II, buch 2, p. 727. ["Habitat in ripis praeruptis, arenosis, praecipue ad Irten copiosissima, canalibus horizontalibus latens."]

Luebo, Kongo. (D. W. Snyder.) [U.S.N.M.] Three females.

I am unable to separate these individuals from a female from Morocco determined by Saussure and fully representing true *riparia*.

LABIDURA MONGOLICA new species.

Type.—Female; Pekin, Chi-li, China. April, 1901. (M. L. Robb.) [Cat. No. 8164, U.S.N.M.]

A large form of the *riparia* type and apparently allied to *L. bidens* of the West Indies. It does not appear to fit any of the numerous forms previously described, though it is possibly the one to which Motschulsky applied the *nomen nudum* of *Forficula amurensis*.^a

Size very large; form as usual in the genus. Head rather deplinate, the impressed lines distinct but faint; eyes hardly projecting; antennae with the basal joint large, subcylindrical, the second sub-spherical, the third slightly more than twice the length of the second, equal in width. Pronotum quadrate, the margins very slightly arcuate, the cephalic angles very narrowly, the caudal angles moderately rounded; lateral, longitudinal, and median transverse depressions marked, a slight median longitudinal sulcus present on the cephalic half. Tegmina half again as long as the pronotum; "shoulder" angles rounded, caudal margins slightly arcuate; the deflected lateral portions separated from the dorsum by a distinct angle cephalad, which becomes subobsolete caudad. Exposed portion of the wings short, rounded. Abdomen very slightly depressed, gradually but slightly expanding caudad; anal segment over twice as broad as long, lateral margins subparallel, the caudal margin subtruncate with a blunt tubercle at the base of each arm of the forceps, between which are two parallel spiniform processes, as in *L. bidens*; subgenital plate transverse trigonal, the apex sinuato-truncate; pygidium cuneiform, the apex truncate. Forceps rather long, equal to the exposed portion of the abdomen and anal segment united, gently bowed, tips rather blunt, an internal tooth placed slightly before the apical third. Limbs, with the femora slightly inflated; proximal and distal segments of the tarsi equal in the cephalic and median pair, the proximal much exceeding the distal in the caudal pair.

General color tawny ochraceous, marked with blackish. Head suffused above, the eyes clear black; pronotum black, except for lateral and median longitudinal lines of the lighter color; tegmina with the same color pattern as the pronotum, but the dorso-lateral angle is also

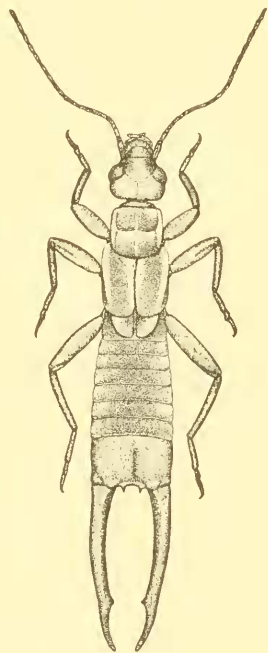


FIG. 2.—LABIDURA MONGOLICA.
× 2.

^a Bull. Soc. Imp. Nat. Moscou, XXXII, p. 499.

marked with blackish; abdomen with all the segments except the anal suffused above with blackish, below with very dark brown; caudal margin of the anal segment marked with reddish-brown; forceps with the apical half suffused with reddish-brown, becoming blackish toward the tips; limbs tawny ochraceous.

Measurements.

	mm.
Length of body (exclusive of the forceps).....	22.0
Length of pronotum.....	3.5
Length of tegmen.....	5.2
Length of anal segment.....	3.0
Breadth of anal segment.....	5.5
Length of forceps.....	11.5

Genus **BORMANSIA** Verhoeff.

1902. *Bormansia* VERHOEFF, Zool. Anzeiger, XXV, p. 184.

Included *B. africana* and *impressicollis* Verhoeff, of which the former may be considered the type.

BORMANSIA MERIDIONALIS Burr.

1904. *Bormansia meridionalis* BURR, Insecta Transvaaliensia, V, p. 97, fig. 13. [Zoutpansberg, Transvaal.]

Luebo, Kongo. (D. W. Snyder.) [U.S.N.M.] One female.

This specimen appears to be closer related to this species than to either *B. africana* and *impressicollis* Verhoeff, from German East Africa, which, in addition to other characters, are of much greater size.

Genus **LABIDURODES** Dubrony.

1879. *Labidurodes* DUBRONY, Ann. Mus. Civ. Stor. Nat. Genova, XIV, p. 355.

Type.—*L. robustus* Dubrony.

LABIDURODES MAGNIFICUS, new species.

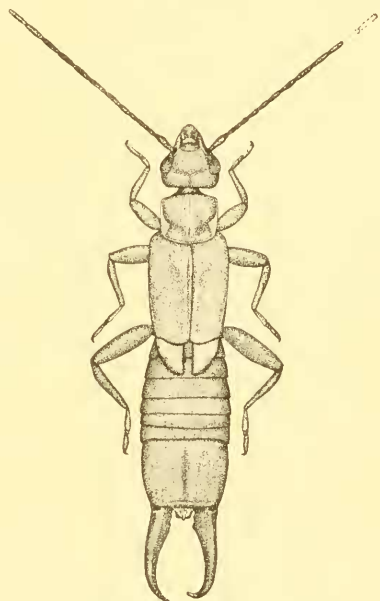
Type.—Male; Khow Sai Dow, Trong, Lower Siam, 1,000 feet elevation. January–February, 1899. (W. L. Abbott.) [Cat. No. 8167, U.S.N.M.]

Allied to *L. robustus*, but differing in the transverse pronotum, longer tegmina and wings, the fewer antennal joints, and the absence of lateral plicæ on the abdomen.

This species is very close to *Labidura*, and may be an annectant type. The resemblance to *Psalis* is also very great.

Size large; form subequal, slightly constricted mesad, considerably depressed; surface of the head, pronotum, tegmina, and wings glabrous, of the abdomen and forceps punctate, particularly on the segments of the abdomen other than the anal. Head elongate trigonal, truncate caudad; deplanate dorsad, impressed lines very faint; eyes

very slightly projecting; antennæ with fourteen joints present, proximal one large, constricted proximad, second joint small and subspherical, third joint cylindrical, not quite half the length of the proximal, fourth and fifth joints slightly smaller than the third, from this point the segments gradually increase in length toward the apex. Pronotum slightly transverse, the margins all very slightly arcuate, the caudal angles more rounded than the cephalic, the latter each supplied with several long, stiff bristles; lateral depressions not deep, a transverse depression caudad of the middle is faint and incomplete mesad; median longitudinal sulcus very faint but precurrent. Tegmina slightly more than twice the length of the pronotum; "shoulder" angles rounded, a distinct lateral carina present; caudal margins subtruncate; the tegmina when in normal position narrower caudad than cephalad. Exposed portion of the wings less than a third the length of the tegmina, rounded with the tips abruptly truncate. Abdomen narrow cephalad, increasing in breadth caudad, the margins of the segments supplied more or less regularly with long, stiff bristles; anal segment subquadrate, the caudal margin truncate, a distinct but shallow longitudinal median depression present; subgenital plate trigonal, a moderately elevated medio-longitudinal area subglabrous, flanked by subovate areas of linear irregular rugosities; pygidium with the proximal portion subtrigonal, the distal portion longitudinal, subequal, the apical section expanded into a narrow lamellate structure. Forceps almost equal to the tegmina in length, somewhat depressed, gently curved except in the distal fourth of the right arm, which is strongly hooked, and the distal half of the left arm which is regularly but not strongly curved; internal margins with several crenulations on the proximal third, otherwise unarmed. Limbs with the femora distinctly inflated; tarsi of the cephalic pair with the distal joint distinctly longer than the proximal, of the median pair slightly longer, of the caudal pair distinctly shorter, second joint depressed, cordiform; arolia present, minute.

FIG. 3.—*LABIDURODES MAGNIFICUS*. $\times 2$.

General color blackish bay, brighter cephalad; exposed portions of the wings ocher yellow with the lateral margins dark; feet paler, inclined toward yellowish, with the hairs golden brown.

Measurements.

	mm.
Length of body (excluding forceps)	24.0
Length of pronotum.....	3.3
Length of tegmen	7.9
Length of anal segment.....	4.5
Length of forceps.....	6.5

The type is unique.

Genus GONOLABIS Burr.

1900. *Gonolabis* BURR, Ann. Soc. Entom. Belg., XLIV, p. 48.

Type.—*Anisolabis jarana* Bormans.

GONOLABIS LATIVENTRIS (Philippi).

1863. *Forficula lativentris* PHILIPPI, Zeitschr. Gesam. Naturwissen., XXI, p. 217.
[Province of Valdivia, Chile.]

Concepcion, Chili. December, 1903. (Carlos S. Reed.) [A. N. S. Phila.] Two males. Penco, Chili, December, 1903. (Carlos S. Reed.) [A. N. S. Phila.] One female.

Genus ANISOLABIS Fieber.

ANISOLABIS MARITIMA (Gené).

1832. *Forficula maritima* GENÉ, Saggio di una Monografia delli Forficule Indigene, p. 9. [Genoa, Italy; Nice, France; Mount Lebanon, Syria.]

Nara, Yamato, Hondo, Japan. (Y. Hirase.) Fifty-eight males, fifty-eight females. [A. N. S. Phila.]

Kyoto, Yamashiro, Hondo, Japan. (Y. Hirase, No. 64.) Eleven males, eleven females. [Hebard Collection.]

New Zealand. (Koebele.) Two females. [U.S.N.M.]

The above large series exhibits an enormous amount of individual variation in size, females ranging from 16.5 to 26 millimeters in total length, and males from 16.7 to 25.

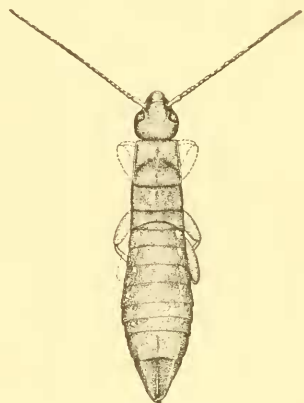
ANISOLABIS PLUTO, new species.

Type.—Female; Mount Coffee, Liberia. (O. F. Cook.) [Cat. No. 8165, U.S.N.M.]

Allied to *A. maritima*, *mauritanica*, and *rufescens*, but differing from the first in the heavier forceps, from *mauritanica* in the weak teeth on the internal margin of the same as well as the absence of distinct pubescence, and from *rufescens* in the blackish head and pronotum.

Size medium; form elongate subfusiform, greatest width across the caudal portion of the abdomen, moderately depressed; surface finely punctate. Head slightly narrower caudad than across the eyes, deplane, usual impressed lines obsolete; eyes not projecting; antennae

diminishing in thickness toward the apex, basal joint large, cylindrical, strongly constricted proximad, second small, much narrower than the basal, third joint nearly twice the length of the second, fourth and fifth bead-like, the remainder gradually increasing in length distad. Pronotum subquadrate, slightly broader caudad than cephalad, angles hardly rounded, transverse impression slightly behind the middle broad and moderately impressed, longitudinal median sulcus subobsolete. Mesonotum transverse, about twice as wide as long, a very faint median sulcus present. Metanotum transverse, almost as long laterad as the mesonotum, caudal margin arcuato-emarginate. Abdomen with the lateral plicæ on the three fully exposed proximal segments weak and hardly perceptible except on the third segment; anal segment transverse, more than half as long as broad, the cephalic margin slightly emarginate, the median longitudinal sulcus distinct; subgenital plate transverse trigonal. Forceps short, heavy, recurved in the distal half, the tips with blunt hooks, the internal margins crenulate. Caudal limbs with the proximal joint of the tarsi slightly longer than the distal.

FIG. 1.—ANISOLABIS PLUTO. $\times 2$.

General color, seal brown; palpi, antennæ, and limbs tawny-olive.

Measurements.

	mm.
Length of body (exclusive of forceps)	16.2
Length of pronotum.....	2.9
Length of mesonotum	1.5
Length of anal segment.....	2.0
Length of forceps	3.0

A paratypic female of this species has also been examined.

Genus LABIA Leach.

LABIA BRUNNEA Scudder

1876. [*Labia*] *brunnea* SCUDDER, Bull. U. S. Geol. Surv. Terr., II, pp. 257, 258. [Cuba.]

Cayamas, Santiago Province, Cuba. March 3 and 8. (E. A. Schwarz.) [U.S.N.M.] Two males.

LABIA NIGROFLAVIDA, new species.

Type.—Female; Cairns, Queensland, Australia. (Koebele.) [Cat. No. 8168, U.S.N.M.]

Allied to *L. grandis* Bormans, from Australia, New Guinea, and the Aru Islands, but differing in the lesser number of antennal joints.

the almost uniform color of the same appendages, and the longer, slenderer, and less dentate forceps.

Size medium (for the genus); form elongate fusiform, slightly depressed; surface finely punctate on the abdomen and forceps; glabrous elsewhere. Head equal in width in the caudal half, gently rounded; antennae composed of thirteen joints, the proximal sub-conic, the second small, third slightly longer than the fourth or fifth, the latter two subequal, the remaining joints regularly increasing in length. Pronotum slightly larger than broad, the lateral margins very slightly expanding caudad; caudal angles and caudal margin rotundato-arcuate; transverse impression broad and shallow, caudad of the middle, the whole caudal half being lower than the cephalic half, which is slightly inflated; a faint median longitudinal sulcus present. Tegmina slightly more than half the length of the pronotum; "shoulder" angles rounded, projecting but little beyond the pronotum; caudal margins obliquely truncate toward the median line. Ex-



FIG. 5.—*LABIA NIGRO-FLAVIDA*. $\times 24$.

posed portions of the wings about two-thirds the length of the pronotum, rounded, with the tips sharply truncate. Abdomen with lateral plicae present on two segments, the distal of the two segments with them more marked than on the other; anal segment but little longer than the next segment proximad, gradually narrowed caudad, bearing along the truncate caudal margin a number of distinct rasp-like tubercles; subgenital plate transverse, the distal margin broadly arcuate. Forceps about as long as the tegmina, parallel, moderately slender, gently curved in the distal third and overlapping, the internal margins crenulate. Femora distinctly though moderately inflated.

General color, seal brown, with a very faint blue-black sheen to the abdomen; caudo-lateral margins of the pronotum and exposed portions of the wings buffy; the limbs are of the general color, touched with claret brown.

Measurements.

	mm.
Length of body (excluding the forceps)	8.2
Length of pronotum	1.5
Length of tegmen	2.5
Length of forceps	2.6

The type is unique.

Genus *CHELISOCHES* Scudder.

1876. *Chelisoches* SCUDDER, Proc. Boston Soc. Nat. Hist., XVIII, p. 295.

Type.—*Lobophora rufitarsis* Serville.

CHELISOCHES STRATIOTICUS, new species.

Type.—Female; Trong, Lower Siam. (Dr. W. L. Abbott.) [Cat. No. 8170, U.S.N.M.]

A member of the group comprising *pulehripennis* and *glaucopterus*, but apparently closer to the last-mentioned species. It can be readily distinguished by the shorter pygidium, the more depressed and less distinctly dentate forceps, and several other characters.

Size large; form subfusiform, greatest width abdominal, depressed; surface subglabrous, the abdomen finely punctate. Head longer than broad, strongly depressed with a pair of converging depressions extending back from the eyes; lateral margins slightly and gradually constricted caudad of the eyes; caudo-lateral angles moderately rounded; caudal margin with a median rotundate emargination; eyes small, hardly projecting beyond the head; antennae composed of fourteen segments, the proximal large, cylindrical, strongly constricted toward the head; second joint small, short; third joint about half the length of the first; fourth joint small, but larger than the second, remaining joints gradually increasing in length distad. Pronotum subquadrate, lateral margins slightly expanding caudad, cephalic margin subtruncate with a median low rounded protuberance, caudo-lateral angles rounded, caudal margin rotundato-angulate; cephalic half with a crescentic depressed area on each side extending from the antero-lateral angles to the median line, a shallow and rather indistinct longitudinal median sulcus present on the cephalic half. Tegmina almost twice the length of the pronotum; "shoulder" angles projecting little beyond the sides of the pronotum; caudal margins truncate. Exposed portions of the wings extending a distance beyond the tegmina less than the length of the pronotum, rounded, tips narrowly truncate. Abdomen with the dorsal margins of the distal segments with numerous short plicae, strong lateral plicae present on the third segment; anal segment strongly transverse, caudal margin truncate, thickened and supplied with rasp-like tubercles except on the median section, which is depressed with a median sulcus between two small tuberculate ridges; subgenital plate transverse, the margin arcuate; pygidium longitudinal, reversed cuneiform, the distal portion not more than half the proximal width, apex roundly emarginate. Forceps about equal to the head, pronotum, and tegmina in length, distinctly depressed, very gently arcuate, except the distal fourth which

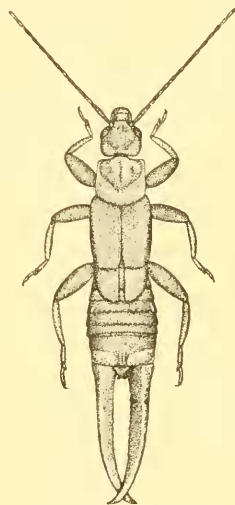


FIG. 6.—CHELISOCHES STRATIOTICUS. $\times 2$.

is distinctly curved; internal margins irregularly serrato-dentate. Femora short, strongly inflated, particularly the cephalic and median pairs; tarsi with narrow transverse arolia present.

General color burnt umber, pale on the tarsi and very dark, almost blackish, on the abdomen; antennae rather pale at the tips.

Measurements.

	mm.
Length of body (exclusive of forceps)	15.5
Length of pronotum.....	3.1
Length of tegmen	5
Length of anal segment.....	2
Greatest width of anal segment.....	4.5
Length of forceps.....	9.5

The type is unique.

Genus ANCISTROGASTER Stål.

ANCISTROGASTER FALCIFERA, new species.

Type.—Male; Piches and Perene valleys, Peru, 2,000–3,000 feet. (Soc. Geog. de Lima.) [Cat. No. 8172, U.S.N.M.]

Allied to *A. variegata* Dohrn from Venezuela, but differing in the brownish-black color of the terminal abdominal segments and the reddish lateral margins of the pronotum.

Size medium; form, as usual in the genus, depressed; surface supplied with short closely placed hairs. Head



FIG. 7.—ANCISTROGASTER FALCIFERA. $\times 2$.

distinctly but moderately inflated between the eyes and bearing a pair of deep median punctures, caudal section depressed; caudal margin truncato-emarginate, caudo-lateral angles rounded; eyes rather large, considerably projecting; antennae with nine joints present, the proximal joint long, slender, tapering proximad, second joint minute, third joint slightly more than half the length of the first, fourth subequal to the third, fifth joint nearly as long as the first, the remaining joints similar to the fifth, but each slightly increasing in length over the next proximal one. Pronotum subquadrate, small, slightly narrower than the width of the head across the eyes, lateral and caudal margins

arcuate, the caudo-lateral angles broadly rounded, cephalo-lateral angles narrowly rounded; lateral portions of the pronotum with depressed longitudinal areas near the lateral margins and slightly converging caudad, median transverse depression shallow, broad, present between these lateral areas, longitudinal median sulcus distinct only cephalad. Tegmina about two and a half times the length of the pronotum, broad, the "shoulder" angles moderately rounded, caudal margins truncate.

Exposed portion of the wings slightly more than half the length of the tegmina, the lateral margins rather tapering, the tips narrowly truncate. Abdomen strongly constricted cephalad and narrowed caudad at the anal segment; lateral plicæ present on the proximal segments; depressed lateral unguicular processes present on three segments, adpressed and recurved, the two segments cephalad of the anal unarmed; anal segment transverse, the caudal margin very slightly arcuate, slightly depressed, median longitudinal sulcus very faint; subgenital plate transverse, caudal margin rotundato-emarginate, the angles projecting; pygidium cuneiform, the apex slightly expanded, truncate. Forceps of the type usual in the genus, bent arcuate, the apex spiniform, the thickened pre-apical portion moderate in size and armed proximad with a spine similar to the apical but smaller and blunter. Limbs slender; tarsi with the second joint strongly depressed, cordiform, no arolia present.

General color dull brownish black; head orange-rufous, eyes black, antennæ chestnut becoming blackish distad; pronotum with the lateral portions ferruginous; forceps ferruginous; limbs inclined toward cinnamon.

Measurements.

	mm.
Length of body (excluding forceps)	11.0
Length of pronotum.....	1.7
Length of tegmen	3.6
Greatest abdominal width	4.6
Width of anal segment.....	2.5
Length of forceps.....	5.0

The type is unique.

Genus OPISTHOCOSMIA Dohrn.

OPISTHOCOSMIA BOGOTENSIS, new species.

Type.—Male; Bogota, Colombia. (Coll. Henry G. Klages.) [Cat. No. 8166, U.S.N.M.]

Apparently allied to *O. brahma* Burr from northern India, but differing in the greater size, the different coloration, and the peculiar sculpture of the dorsal surface of the last abdominal segment. Like that species it appears to be quite distinct from any of the other forms of the genus.

Size large; form strongly depressed; surface smooth, dull, on the abdomen and forceps supplied with numerous points as detailed in the following. Head subtrigonal, slightly elongate, slightly inflated; caudal margin truncate; eyes rather large and prominent; antennæ rather thick, strongly compressed proximad. Pronotum very slightly transverse, the cephalic and lateral margins straight, the cephalo-lateral angles very slightly rounded; caudal margin arcuate, caudo-lateral angles obtusely rounded; transverse median depressed area

very distinct, the cephalic half distinctly inflated, lateral margins distinctly elevated, and mesad with distinct subparallel depressions; longitudinal median sulcus faintly impressed on cephalic half, absent on caudal. Tegmina about two and a half times the length of the pronotum, broad, the "shoulder" angles narrowly rounded; caudal margins obliquely rotundato-emarginate toward the median line. Exposed portions of the wings about equal to the length of the pronotum proximal, as broad as caudal margin of the tegmina, evenly rounded, with the tips rather narrowly truncate. Abdomen distinctly expanded mesad; three proximal segments with continuous lateral plicae, which are very faint on the first and increase gradually in size distad, terminating abruptly in a large thickened mass on the third segment; dorsal

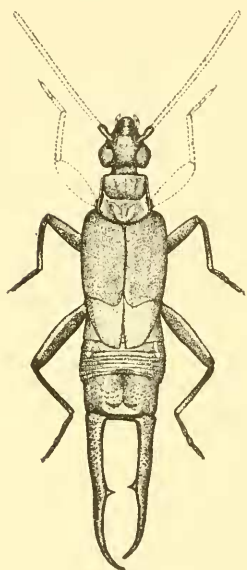


FIG. 8.—*OPISTHOCOSMIA BOGOTENSIS*. $\times 2$.

and lateral margins of all segments except the proximal one supplied with series of small, bead-like tubercles, which are subobsolete on the median portions of the distal segments but quite distinct laterad; anal segment transverse, twice as broad as long, strongly depressed mesad with a distinct longitudinal sulcus at the bottom of the depression, which is anchor shaped, spreading out distad, and embracing two distinct prominences, caudal margin truncate, surface of the plate with numerous rasp-like tubercles; subgenital plate transverse, about twice as wide as long, the caudal margin moderately arcuate; pygidium rectangulate, the distal margin truncate, a distinct median longitudinal sulcus present. Forceps elongate, but slightly shorter than the combined length of the pronotum, tegmina, and exposed portions of the wings, rounded dorsad, flattened ventrad, moderately straight in the basal half or slightly less (the left arm considerably exceeding the right in length), armed at this point

with a short thick tooth on the ventral portion of the internal face, distal section of the forceps evenly arcuate, the longer left arm slightly hooked distad; surface of the forceps covered with evenly distributed asperities, those of the ventral surface minute. Limbs rather slender; femora hardly inflated; second and third joints of the caudal tibiae together hardly exceeding the proximal in length; second joint strongly compressed proximad, third joint strongly depressed, elliptical, no arolia present.

General color seal brown, becoming burnt umber on the forceps and touched with ochraceous on the limbs; exposed portions of the wings ochraceous, with the lateral margins marked with the general color.

Measurements.

	mm.
Length of body (exclusive of forceps).....	16.5
Length of pronotum	2.9
Length of tegmen.....	6.5
Length of anal segment	2.3
Breadth of anal segment.....	5.0
Length of forceps (left arm)	10.6

The type is unique.

Genus *APTERYGIDA* Westwood.*APTERYGIDA* 'ARACHIDIS (Yersin).

1860. *Forficula arachidis* YERSIN, Ann. Soc. Ent. France (3), VIII, p. 509, pl. x, figs. 33, 34 and 35. [Marseilles, France].

Jamaica. [U.S.N.M.] One male.

This specimen is somewhat larger than specimens from Aguadilla, Porto Rico, recorded as *Apterygida gravidula*.^a

APTERYGIDA *ERYTHROCEPHALA* (Olivier).

1791. *Forficula erythrocephala* OLIVIER, Encyc. Method., Ins., VI, Pt. 2, p. 468. [Cape of Good Hope.]

Luebo, Kongo. (D. W. Snyder.) [U.S.N.M.] One male. Congo. [U.S.N.M.] Two males, one female. Mount Coffee, Liberia. (G. P. Goll.) [U.S.N.M.] One male, one female.

Genus *FORFICULA* Linnæus.*FORFICULA* *AURICULARIA* Linnæus.

1758. [*Forficula*] *auricularia* LINNÆUS, Syst. Nat., 10th ed.; p. 423. [Europe.]

Flores, Azores. (Wm. Trelease.) [U.S.N.M.] Two males, two females.

FORFICULA *SCHWARZI*, new species.

Type.—Female; Cayamas, Santiago Province, Cuba. March 4. (E. A. Schwarz.) [Cat. No. 8169, U.S.N.M.]

This species appears to be quite distinct from any other member of the genus, principally on account of the peculiar forceps and coloration.

Size medium; forceps elongate, depressed; surface glabrous. Head about as broad as long, distinctly broader across the eyes than cephalad, caudal angles rather evenly rounded; above subdeplanate, impressed lines distinct; eyes roundly protuberant; antennæ with nine joints, proximal elongate cylindrical, second joint narrower than the proximal and about a third the length, third joint slightly longer than

^aTrans. Amer. Entom. Soc., XXIX, p. 129.

the second, from this joint the succeeding articles regularly increase in length distad. Pronotum as broad as long; cephalic margin truncate, lateral and caudal margins and caudo-lateral angles arcuate, cephalo-lateral angles slightly obtuse; transverse median depressed area slight, lateral regions with slight longitudinal depressions, longitudinal median sulcus present, slight, very faint caudad. Tegmina slightly more than twice the length of the pronotum, moderately expanded, "shoulder" angles rather narrowly rounded; caudal margin of each tegmen arcuato-emarginate. Exposed portions of the wings nearly half as long as the tegmina, rounded on the distal half. Abdomen slightly inflated mesad, the segments armed laterad, and the distal one (excluding anal segment) dorsad with marginal series

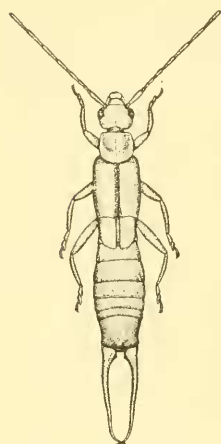


FIG. 9.—*FORFICULA SCHWARZI*.
× 2.

of bead-like prominences, two proximal segments with lateral plicae; anal segment slightly broader than long, slightly constricted caudad, caudal margin slightly produced, thickened, truncate between the centers of the arms of the forceps; subgenital plate transverse, caudal margin broadly arcuate; pygidium subcuneiform, constricted mesad, the base trigonal. Forceps equal to the pronotum, tegmina and exposed portions of the wings in length, moderately depressed, expanded at the base with a short internal lamellate ridge, which bears a distinct distal tooth and crenulations on the remainder of the edge; arms subparallel, very slightly caudad of the middle, tips evenly curved mesad, acute, crossed; internal surface of the arms without a distinct ridge and unarmed. Limbs of moderate size, cephalic

femora slightly inflated; tarsi strongly depressed, the second joint distinct cordiform and extending considerably beneath the third joint; arolia absent.

General color of the head, pronotum, tegmina and exposed portions of the wings buff, rather diluted and weak on the head and pronotum; eyes blackish-brown; antennae slightly obscured distad; tegmina with all the margins except the caudal lined with seal brown, the lateral margins very broadly marked; exposed portions of the wings buff margined laterad with seal brown, the bar narrowing and becoming evanescent caudad. General color of abdomen tawny-olive, more reddish, the ventrad margins of the segments broadly marked with blackish laterad; anal segment ferruginous, margined caudad with blackish; pygidium blackish. Forceps rather pale ochraceous, becoming ferruginous distad, the margins of the basal expansions blackish. Cephalic limbs buff; median and caudal limbs tawny-olive, the median touched with ferruginous.

Measurements.

	mm.
Length of body (exclusive of forceps)	14.5
Length of pronotum.....	1.9
Length of tegmen	4
Length of anal segment.....	2
Length of forceps	6.2

The type is unique.

I take pleasure in dedicating this striking species to Mr. E. A. Schwarz, the eminent coleopterist, who collected the type.